



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,678	11/20/2003	Yoshihiko Hori	8004-1015	7373

466 7590 07/21/2005

YOUNG & THOMPSON  
745 SOUTH 23RD STREET  
2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER

WAMSLEY, PATRICK G

ART UNIT PAPER NUMBER

2819

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/716,678

Applicant(s)

HORI, YOSHIHIKO

Examiner

Patrick G. Wamsley

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06/15/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 3, 7-12, 14, 16-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1, 2, 4-6, 13, 15 and 19-24 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                               |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/19/2004</u> | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Restriction / Election of Species***

Applicant's election with traverse of the species depicted in Figure 10, allegedly readable upon claims 1, 2, 4, 5, 6, 13, 15, 19, 20, 21, 22, 23, and 24 in the reply filed on 06/15/2005 is acknowledged. Claims 3, 7-12, 14, 16-18 are withdrawn from consideration. The traversal is on the grounds that the consideration of all claims does not amount to an increased searching burden. This is not found persuasive because parallel-to-serial and serial-to-parallel converters are assigned to different subclasses. While both converters are coding devices, their search areas are not identical.

As set forth in M.P.E.P. 810.02, Patent Office policy is to defer action on the merits until after the requirement for restriction is complied with, or withdrawn. Applicant has neither elected a specific invention nor presented arguments to convincingly persuade the examiner to withdraw the restriction requirement. As noted in the second sentence of 37 C.F.R. 1.143, a provisional election must be made even though the restriction is traversed. See M.P.E.P. 818.03(b).

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1, 2, 4, 5, and 6, drawn to parallel to serial conversion, classified in class 341, subclass 101.
- II. Claim 13, drawn to serial to parallel conversion, classified in class 341, subclass 100.

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable.

In the instant case, invention I has separate utility such as parallel to serial conversion independent of serial to parallel conversion. See M.P.E.P. § 806.05(d).

Claims 15, 19, 20, 21, 22, 23, and 24 appear to link the two inventions.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

### ***Specification***

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

Claim 19 is objected to because of the following informalities:

Claim 19, line 5: Change "to generat" to -- to generate --.

Claim 19, lines 24-25: Change "date reception" to -- data reception --.

Appropriate correction is required.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,707,399 to Wang et al describes data realignment techniques for serial-to-parallel conversion. U.S. Patent 6,232,895 to Djupsjobacka et al uses a logic circuit to couple a serial-to-parallel converter to a parallel-to-serial converter. U.S. Patent 6,052,073 to Carr shows a multiplexed serial-to-parallel converter. U.S. Patent 5,982,309 to Xi et al displays a multiplexed parallel-to-serial converter.

U.S. Patent 5,259,000 to Kojima et al couples a parallel to serial converter [605] to a serial-to-parallel converter [606]. U.S. Patent 4,674,064 to Vaughn uses latches [157/159] to couple a serial to parallel converter [155] to a parallel to serial converter [163]. U.S. Patent 4,620,311 to Schouhamer Immink uses encoding [3] and decoding [8] circuits to link series-parallel converters [2/7] to parallel-series converters [4/9]. U.S. Patent 4,158,107 to Nicholas links a serial-to-parallel converter [12] to a parallel-to-serial converter [42] by means of a RAM [16].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick G. Wamsley whose telephone number is (571) 272-1814. The official facsimile number is (571) 273-8300. An alternate facsimile number, (571) 273-1814, should only be used for unofficial documents.



*Patrick G. Wamsley*

*July 15, 2005*